## THE ASTROPHYSICAL JOURNAL LETTERS

## CONTENTS OF VOLUME 623, PART 2

# 2005 APRIL 10, NUMBER 1

	Page
ARE THE WMAP ANGULAR MAGNIFICATION MEASUREMENTS CONSISTENT WITH AN INHOMOGENEOUS CRITICAL DENSITY UNIVERSE?  Richard Lieu and Jonathan P. D. Mittaz	LI
STELLAR AND TOTAL MASS IN EARLY-TYPE LENSING GALAXIES Ignacio Ferreras, Prasenjit Saha, and Liliya L. R. Williams	L5
AN INDEPENDENT DERIVATION OF THE OXFORD JET KINETIC LUMINOSITY FORMULA Brian Punsly	L9
GALEX ULTRAVIOLET OBSERVATIONS OF THE INTERACTING GALAXY NGC 4438 IN THE VIRGO CLUSTER  A. Boselli, S. Boissier, L. Cortese, A. Gil de Paz, V. Buat, J. Iglesias-Paramo, B. F. Madore, T. Barlow, L. Bianchi, YI. Byun, J. Donas, K. Forster, P. G. Friedman, T. M. Heckman, P. Jelinsky, YW. Lee, R. Malina, D. C. Martin, B. Milliard, P. Morrissey, S. Neff, R. M. Rich, D. Schiminovich, M. Seibert, O. Siegmund, T. Small, A. S. Szalay, B. Welsh, and T. K. Wyder	L13
THE GALEX ULTRAVIOLET LUMINOSITY FUNCTION OF THE CLUSTER OF GALAXIES A1367  L. Cortese, A. Boselli, G. Gavazzi, J. Iglesias-Paramo, B. F. Madore, T. Barlow, L. Bianchi, YI. Byun, J. Donas, K. Forster, P. G. Friedman, T. M. Heckman, P. Jelinsky, YW. Lee, R. Malina, D. C. Martin, B. Milliard, P. Morrissey, S. Neff, R. M. Rich, D. Schiminovich, O. Siegmund, T. Small, A. S. Szalay, M. A. Treyer, B. Welsh, and T. K. Wyder	L17
MONITORING OF THE PROMPT RADIO EMISSION FROM THE UNUSUAL SUPERNOVA SN 2004dj IN NGC 2403 (E) R. J. Beswick, T. W. B. Muxlow, M. K. Argo, A. Pedlar, J. M. Marcaide, and K. A. Wills	L21
INTRADAY VARIABILITY OF SAGITTARIUS A* AT 3 MILLIMETERS Jon C. Mauerhan, Mark Morris, Fabian Walter, and Frederick K. Baganoff	L25
AN ENERGETIC BLAST WAVE FROM THE 2004 DECEMBER 27 GIANT FLARE OF THE SOFT GAMMA-RAY REPEATER SGR 1806—20 X. Y. Wang, X. F. Wu, Y. Z. Fan, Z. G. Dai, and B. Zhang	L29
BLIND SEARCH FOR THE REAL SAMPLE: APPLICATION TO THE ORIGIN OF ULTRA-HIGH-ENERGY COSMIC RAYS Boris E. Stern and Juri Poutanen	L33
HIGH-VELOCITY FEATURES: A UBIQUITOUS PROPERTY OF TYPE Ia SUPERNOVAE  P. A. Mazzali, S. Benetti, G. Altavilla, G. Blanc, E. Cappellaro, N. Elias-Rosa, G. Garavini, A. Goobar, A. Harutyunyan, R. Kotak, B. Leibundgut, P. Lundqvist, S. Mattila, J. Mendez, S. Nobili, R. Pain, A. Pastorello, F. Patat, G. Pignata, Ph. Podsiadlowski, P. Ruiz-Lapuente, M. Salvo, B. P. Schmidt, J. Sollerman, V. Stanishev, M. Stehle, C. Tout, M. Turatto, and W. Hillebrandt	L37
WHERE ARE ALL THE FALLBACK DISKS? CONSTRAINTS ON PROPELLER SYSTEMS K. Y. Ekşi, L. Hernquist, and R. Narayan	L41
A DYNAMICAL METHOD FOR MEASURING THE MASSES OF STARS WITH TRANSITING PLANETS Abraham Loeb	L45
NUCLEAR SPIN TEMPERATURE AND DEUTERIUM-TO-HYDROGEN RATIO OF METHANE IN COMET C/2001 Q4 (NEAT) E Hideyo Kawakita, Jun-ichi Watanabe, Reiko Furusho, Tetsuharu Fuse, and Daniel C. Boice	L49
MAGNETIC FREE ENERGY IN NOAA ACTIVE REGION 10486 ON 2003 OCTOBER 29 Thomas R. Metcalf, K. D. Leka, and D. L. Mickey	L53
OBSERVATION AND MODELING OF ANOMALOUS CN POLARIZATION PROFILES PRODUCED BY THE MOLECULAR PASCHEN-BACK EFFECT IN SUNSPOTS  A. Asensio Ramos, J. Trujillo Bueno, and M. Collados	L57
INSTRUCTIONS TO AUTHORS OF LETTERS, AND ADDITIONAL USEFUL INFORMATION	Inside Back Cover
INSTRUCTIONS FOR ELECTRONIC MANUSCRIPT SUBMISSION	Back Cover

## 2005 APRIL 20, NUMBER 2

	Page
THE INTEGRATED SUNYAEV-ZELDOVICH EFFECT AS A SUPERIOR METHOD FOR MEASURING THE MASS OF CLUSTERS OF GALAXIES	L63
Patrick M. Motl, Eric J. Hallman, Jack O. Burns, and Michael L. Norman	

#### CONTENTS

THE FATE OF SUPERMASSIVE BLACK HOLES AND THE EVOLUTION OF THE M <sub>BR</sub> -σ RELATION IN MERGING GALAXIES: THE EFFECT OF GASEOUS DISSIPATION Stelios Kazantzidis, Lucio Mayer, Monica Colpi, Piero Madau, Victor P. Debattista, James Wadsley, Joachim Stadel, Thomas Quinn, and Ben Moore	L67
CENTRAL BLUE CLUMPS IN ELLIPTICAL GALAXIES OF THE HUBBLE ULTRA DEEP FIELD Debra Meloy Elmegreen, Bruce G. Elmegreen, and Thomas E. Ferguson	L71
THE STAR FORMATION RATE-DENSITY RELATIONSHIP AT REDSHIFT 3 Nicolas Bouché and James D. Lowenthal	L75
THE ORIGIN OF THE SPATIAL DISTRIBUTION OF X-RAY-LUMINOUS ACTIVE GALACTIC NUCLEI IN MASSIVE GALAXY CLUSTERS (©)  Joshua T. Ruderman and Harald Ebeling	L81
DISCOVERY OF AN X-RAY-LUMINOUS GALAXY CLUSTER AT $z=1.4$ C. R. Mullis, P. Rosati, G. Lamer, H. Böhringer, A. Schwope, P. Schuecker, and R. Fassbender	L85
THE INFLUENCE OF AN AMBIENT MAGNETIC FIELD ON RELATIVISTIC COLLISIONLESS PLASMA SHOCKS © Christian Busk Hededal and Ken-Ichi Nishikawa	L89
RAPID COMPTON-THICK/COMPTON-THIN TRANSITIONS IN THE SEYFERT 2 GALAXY NGC 1365 © G. Risaliti, M. Elvis, G. Fabbiano, A. Baldi, and A. Zezas	L93
HOT BARYONS AND THE DISTRIBUTION OF METALS IN THE INTERGALACTIC MEDIUM Jason Tumlinson and Taotao Fang	L97
DIAGNOSTICS OF QUASAR BROAD ABSORPTION LINE GEOMETRY: X-RAY OBSERVATIONS AND TWO-DIMENSIONAL OPTICAL SPECTROSCOPY  Brian Punsly and Sebastian Lipari	L101
A COMPARISON OF SURFACE BRIGHTNESS PROFILES FOR ULTRACOMPACT DWARFS AND DWARF ELLIPTICAL NUCLEI: IMPLICATIONS FOR THE "THRESHING" SCENARIO  R. De Propris, S. Phillipps, M. J. Drinkwater, M. D. Gregg, J. B. Jones, E. Evstigneeva, and K. Bekki	L105
RADIO EMISSION ASSOCIATED WITH THE ULTRALUMINOUS X-RAY SOURCE IN HOLMBERG II Neal A. Miller, Richard F. Mushotzky, and Susan G. Neff	L109
CAN THE LASER INTERFEROMETER SPACE ANTENNA RESOLVE THE DISTANCE TO THE LARGE MAGELLANIC CLOUD? Asantha Cooray and Naoki Seto	L113
DISCOVERY OF MORE THAN 200 RR LYRAE VARIABLES IN M62: AN OOSTERHOFF I GLOBULAR CLUSTER WITH A PREDOMINANTLY BLUE HORIZONTAL BRANCH  R. Contreyas, M. Catelan, Horace A. Smith, Barton J. Pritzl, and J. Borissova	L117
A BROAD IRON LINE IN THE CHANDRA HIGH ENERGY TRANSMISSION GRATING SPECTRUM OF 4U 1705-44 <b>E</b> T. Di Salvo, R. Iaria, M. Méndez, L. Burderi, G. Lavagetto, N. R. Robba, L. Stella, and M. van der Klis	L121
A VARIABLE INFRARED COUNTERPART TO THE SOFT GAMMA-RAY REPEATER SGR 1806–20 George Kosugi, Ryusuke Ogasawara, and Hiroshi Terada	L125
ON THE EVIDENCE OF DISKS AROUND BLUE STRAGGLER STARS John M. Porter and R. H. D. Townsend	L129
PREDICTED AND EMPIRICAL RADII OF RR LYRAE STARS M. Marconi, T. Nordgren, G. Bono, G. Schnider, and F. Caputo	L133
A LARGE X-RAY OUTBURST IN MIRA A Margarita Karovska, Eric Schlegel, Warren Hack, John C. Raymond, and Brian E. Wood	L137
AN EXTREMELY LARGE EXCESS OF <sup>18</sup> O IN THE HYDROGEN-DEFICIENT CARBON STAR HD 137613 Geoffrey C. Clayton, Falk Herwig, T. R. Geballe, Martin Asplund, Emily D. Tenenbaum, C. W. Engelbracht, and Karl D. Gordon	L141
PULSATIONS OF THE Oe STAR & OPHIUCHI FROM MOST SATELLITE PHOTOMETRY AND GROUND-BASED SPECTROSCOPY G. A. H. Walker, R. Kuschnig, J. M. Matthews, P. Reegen, T. Kallinger, E. Kambe, H. Saio, P. Harmanec, D. B. Guenther, A. F. J. Moffat, S. M. Rucinski, D. Sasselov, W. W. Weiss, D. A. Bohlender, H. Božić, O. Hashimoto, P. Koubský, R. Mann, D. Ruždjak, P. Škoda, M. Šlechta, D. Sudar, M. Wolf, and S. Yang	L145
CAN PHOTOEVAPORATION TRIGGER PLANETESIMAL FORMATION?  Henry B. Throop and John Bally	L149
$^{62}$ Ni $(n, \gamma)^{63}$ Ni REACTION AND OVERPRODUCTION OF Ni ISOTOPES A. Tomyo, Y. Temma, M. Segawa, Y. Nagai, H. Makii, T. Shima, T. Ohsaki, and M. Igashira	L153
INSTRUCTIONS TO AUTHORS OF LETTERS, AND ADDITIONAL USEFUL INFORMATION	Inside Back Cover
INSTRUCTIONS FOR ELECTRONIC MANUSCRIPT SUBMISSION	Back Cover

